



NZ HOPS - DATA SHEET

"hops with a difference"

GREEN BULLET

Breeding: Released from the New Zealand DSIR (now HortResearch) in 1972 this triploid Alpha Variety was bred by open cross-pollination of the New Zealand "Smoothcone" variety. The era was one where Alpha potential was rapidly being recognised by brewers and the New Zealand Alpha varieties were certainly pushing the boundaries.

Selection: Selection can be confusing with New Zealand Bitter types due to aromatic qualities not usually associated with alpha varieties. The Green Bullet has quite high Alpha while it also produces reasonably high levels of oil that complement and balance the very traditional resinous hop character. An excellent bittering variety that is grower friendly due to its yield and late season maturity.

Brewer's notes: Although a new variety in relative terms, Green Bullet delivers a very real, traditional bittering quality and hop flavour. A flagship within the New Zealand brewing industry this hop has contributed to several International Brewing Industry Awards. Considered a bittering variety typically for Lager, Green Bullet also carries a solid Styrian characteristic of subtle spiciness which finds it at home in a freshly drawn pint of Bitter or an Irish-style Dry Stout.

"utility brewhouse workhorse"

Grower's remarks:	Maturity	Late season. (yes it does "hang on")
	Yield	Moderate to Good.
	Growth Habit	Late shooting, moderately vigorous, clavate frame.
	Cone Structure	Long compact cones.
	Disease Resistance	New Zealand is Hop Disease Free.
	Storage Stability	Good

Technical data: HPLC & Oil Composition (Measured within 6 months of harvest, stored at 0 °C)

Alpha Acids	11.0 – 14.0 %
Beta Acids	6.5% - 7.0 %
Cohumulone	41.0 – 43.0 % of Alpha Acids
Total Oil	1.1 mls oil per 100 gram cone weight
Concentration	65 uL Oil/gram Alpha
Myrcene	38.3 %
Humulene	28.2 %
Caryophyllene	9.2 %
Farnasene	0.3 %
Citrus-Piney Fraction	7.9 %
Floral Estery Fraction	2.3 % (Linalool 1.2 %)
Xanthohumol	0.7 %
Other	10.7%

Applications: Used extensively as a utility brewhouse workhorse and found in several brewing locations internationally. A multi award winner and New Zealand pedigree that is well suited to premium lagers in the mainstream, and works well when included with finishing varieties such as Fuggle and Willamette.